Using GIS to *Publicize* the FDOT Work Plan



Transportation Data Symposium

August 19, 2015



Using GIS to Publicize the FDOT Work Plan

- What is the "Work Plan"
- How Work Plan is currently publicized
- The Dream Provide GIS Map/Data representing FDOT Work Plan externally
 - Easy to understand
 - Basic project info
 - Big picture

Even though Work Program is complex in nature it is of great interest to many stakeholders.



What Is The Work Plan?

- a.k.a. "Work Program"
- A five year plan listing planned transportation projects
- Very LARGE -- FY15 value of projects around \$3B
- Formal legal document required by statute (public)
- Broken down by project/phase/fiscal year
- Typical phases = PE (preliminary engineering), ROW (Right of Way), CST (construction), etc
- Includes phase funding amounts
- VERY important to many stakeholders (public, local agencies, businesses, utilities, etc)

What Is The Work Plan?

Sample extract from Adopted Work Program document:

CITRUS

Five Year Adopted Work Program FY July 1, 2015 Through June 30, 2020 District Seven Florida Department of Transportation

Facility Iter	m No.	Phase	Fund	2015/16	2016/17			
HIGHWAYS								
FPN: 431232	1							
CR 488 FROM US 19 TO W RAINBOW STREET								
DESCRIPTION	I: RESURFACING							
2 LANES								
		CST	GRSC	773,526	0			
		CST	LF	496,000	0			
		CST	SCED	256,410	0			
		CST	SCOP	387,418	0			
		CST	SCWR	70,646	0			
			Total:	1,984,000	0			

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Brooks Bridge Replacement Study

Kick-Off Online Meeting
The Florida Department of Transportation
(FDOT) is conducting a Project More ...



Santa Rosa Sound Alternate Crossing Study

Kick-Off Online Meeting
The Santa Rosa Sound Alternate Crossing
Study is a high-level planning study More ...

Callaway Old Bicycle Rd Parker Map data ©2015 GoogleTerms of UseReport a map error

Lengths and Limits

1.681 MI

Contractor

Anderson Columbia Co, Inc.

Project Manager Rebecca Conlon

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State Construction Office

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		District Name	07		
How to Use the Filters		Fin Project ID Number	42637915801		
		Urban/Rural			
District Statewide		Project Engineer/Manager	Grimsley, Robert / Rose, Tracie DEACTIVATED		
Filter List		Contractor	AJAX PAVING INDUSTRIES OF FLORIDA LLC		
Entire List of	of Contracts, Excel File	Contractor ID	F261871966		
		Description	SR 54 DRAINAGE IMPROVEMENTS,AT SUNCOAST PARKWAY,		
		Original Contract Days	330		
		Adjusted Contract Days			
Contract ID	Status V	Current Contract Days	330	Vendor Name	View Map
i i		Days Used	0	<u>vendor Name</u>	Map
AQM22	WORK BEGUN 0	Original Contract Amount	\$3,421,748.90	IG INDUSTRIES OF FLORIDA LLC	Мар
BDT74		Current Contract Amount	\$3,421,748.90	A FLTP, LLC ESTERN CONTRACTORS, LLC. UILDING CORPORATION	Map Map Map
BDV94	FINAL PAYMENT MADE 0	Change Order Amount		ONSTRUCTION, INC.	Мар
	FINAL PAYMENT MADE 0	Estimate Paid to Date		RETE RESTORATION, INC INSTRUCTION GROUP, INC.	Map Map
		Letting Date	03/30/2010	ONTROL DEVICES, INC.	Мар
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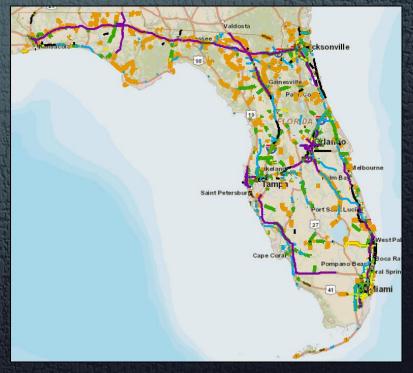


The Dream (Interactive Work Program GIS Map)

- Interactive GIS map
- Web-based, easy to find
- User-friendly for all stakeholders
- Just the facts
 - Project location
 - Basic project info
 - Project contact
- Statewide data

Statewide data





GIS DATA - No Statewide Standard

You don't have anything if you don't have good data!







Map Services



Statewide Oracle (Raw Work Program Data) Spatial Database (GIS Work Program Data, Standardized)

Work Program Viewer (Statewide Framework)

Several Districts configured own data mining routines/viewers



- Different data
- Different viewers

It's a District thing – different flavors for different districts

Different layers, different symbology, different project info

- Work Program

 □ Pre-Design
 □ Design
 □ Under Construction
 □ Construction Complete
 - TENTATIVE WORK PROG 2013-17

 □ Bridge Projects
 □ Capacity Projects
 □ Operations Projects
 □ Resurfacing Projects
 - ✓ Pre-Construction All
 ☐ Between Design-Construction All
 ☐ Under Construction All
 ☐ Completed
 ☐ Active Traffic Ops Pushbutton Projects
 ☐ Inactive Traffic Ops Pushbutton Projects



NEED STATEWIDE GIS DATA

- Need a statewide consistent representation of the Work Program in GIS
- Does NOT replace what Districts have developed
- Statewide GIS viewer means input from across the state

Assemble Statewide Development Team



Meet to develop requirements

Document requirements



Consultant develops app



Beta Delivery

Test Beta



Fix Bugs



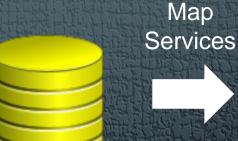
Production Delivery

- Key Decisions
 - Adopted-Amended Version
 - Symbology consistent with Legislative Briefing document (LBD)
 - Layer Organization
 - All (default)
 - By Fiscal Year (FY16, FY17, etc)
 - By Phase (Planning, PDE, Design. ROW, Construction)
 - By Type of Work (Bridge, Capacity, ITS, Resurfacing, etc)
 - Locally Managed Projects
 - Major Projects
 - Project info should include Phase \$\$

- Result of this statewide coordination effort = WPV (Work Program Viewer)
- WPV = Internal GIS viewer
 - Built on statewide framework
 - Behind FDOT firewall (need network connection)
- Not the Dream but closer to the Dream



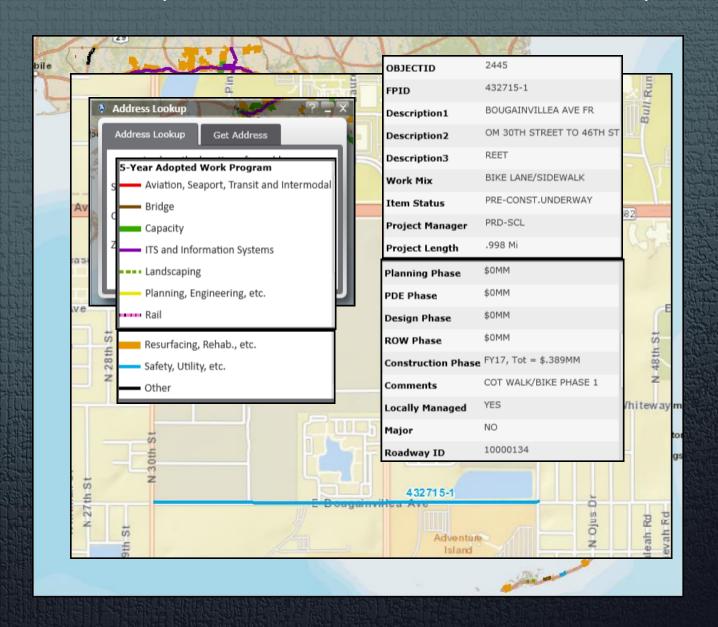
Statewide Oracle (Raw Work Program Data)



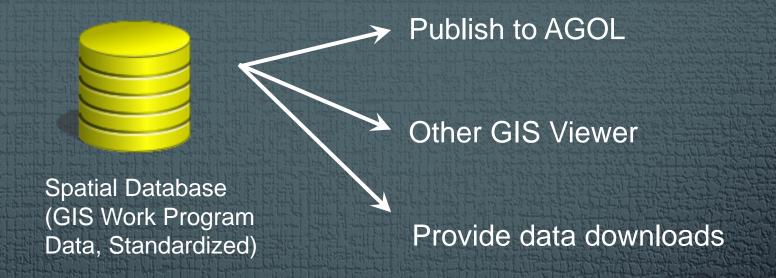


Spatia Spatial Database
(GIS Work Program GIS Work Program GIS Work Paragram Viewer Standardized) Standardized Statewide Framework)

WPV (WORK PROGRAM VIEWER)



Truly External Work Program Viewer/Data



Challenges to Publishing FDOT Data Externally:

- Obtain necessary approvals from Central Office
- Ensure project data QA/QC (statewide)

Missouri Slogan? Show Me State



I'm not from Missouri but you'll have to show me.

Software Demo Rule: The more people that are watching the more likely you will get an "unexpected error".

Work Program Viewer (WPV) 1.2 Dashboard

Questions\Contact Info



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